Amendments to the Claims:

Prior to the present communication, claim 1 was pending in the subject application. Claim 1 has been amended herein and claims 2-7 have been added. Accordingly, claims 1-7 remain pending. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Computer-storage media having computer-executable instructions embodied thereon that, when executed, cause a machine to perform a method ~~in a computing environment~~ for effecting a controlled, recurring assessment of a care episode and service utilization patterns associated with a locale, the locale including a plurality of corresponding institutions, the method comprising the steps of:

accessing transmissions data received from the plurality of corresponding institutions, the transmissions data including one or more distance values and one or more population values, the plurality of corresponding institutions providing health care for a catchment area associated with the locale;

totalizing one or more proband counts;

transforming the distance values, the distance values measured in physical distance or elapsed time, the physical distance or elapsed time measured from a location at which inception of clinical event occurred to a health facility in the catchment area where appropriate care is secured, the distance values transformed using a Box-Cox power transform;

transforming the population values, using a Box-Cox power transform, for the locale where each care episode originates, the population values measured in persons or persons per square mile, wherein transforming the population values is calculated using the equations:

$$D_i = sign(\lambda_1)\frac{D_i^{\lambda_1}}{std(D^{\lambda_1})}$$

$$P_i = sign(\lambda_2)\frac{P_i^{\lambda_2}}{std(P^{\lambda_2})};$$

standardizing, by scaling the distance values and the population values according to a set of standard deviations and a set of signs of one or more respective distributions, the standardizing creating one or more standardized transformed distance values and one or more standardized transformed population values, wherein standardizing is calculated using the equations:

$$D_i = sign(\lambda_1)D_i^{\lambda_1}$$

$$P_i = sign(\lambda_2)P_i^{\lambda_2}$$

where

$$sign(\lambda_j) = \begin{cases} +1 & \text{if } \lambda_j \geq 0 \\ -1 & \text{otherwise} \end{cases};$$

weighting the standardized transformed distance values and the standardized transformed population values and summing the standardized transformed distance values and the standardized transformed population values to form a provisional index;

standardizing the provisional index, by scaling according to a standard deviation of the provisional index <u>using the equation:</u>

$$\underline{d\_episode(i) = \frac{I_i - mean(I)}{std(I)};}$$

iteratively seeking one or more optimal values of power transform exponents λ_1 and λ_2, such that the Anderson-Darling measure of deviation from normality is minimized and close to zero;

applying the resultant values to transform exponents λ_1 and λ_2, to produce an optimized distance indexed value for each case;

analyzing the distribution of the d values to ascertain an optimal binning into one or more distance categories, the distance categories derived from the standardized transformed distance values;

risk-adjusting one or more incidence rates of clinical indicators of access and one or more incidence rates of utilization of health services using a categorized locally transformed normed distance index, distance categories, and age, so as to produce a representation of differences in access to health services based upon time or distance; and

presenting the representation of differences in access to health services to a user using a display in the computing environment,

wherein the clinical indicators assess quality of health services in the locale, the quality assessment including identifying under-resourced locale health care needs, monitoring prevention of medical complications, and comparing performance of the locale to other communities.

2. (New) The media of claim 1, wherein the risk-adjusted incidence rates illustrate the adequacy of access to care services with populations of varying rurality.

3. (New) The media of claim 1, wherein the clinical indicators are ambulatory care sensitive conditions.

4. (New) The media of claim 3, wherein the ambulatory care sensitive conditions include hypertension, asthma, dehydration, low birth weight, perforate appendix, and congestive heart failure.

5. (New) The media of claim 1, wherein the clinical indicators are further used to identify underserved areas.

6. (New) The media of claim 1, wherein weighting the standardized transformed distance values and the standardized transformed population values is calculated using the equation:

$$I_i = \left(\frac{1}{2}\right)[sign(\lambda_1)\frac{D_i^{\lambda_1}}{std(D^{\lambda_1})}] - [sign(\lambda_2)\frac{P_i^{\lambda_2}}{std(P^{\lambda_2})}].$$

7. (New) The media of claim 1, wherein risk-adjusting one or more incidence rates of clinical indicators of access and one or more incidence rates of utilization of health services is calculated using the equation:

$$Y^k_{ijt} = M^k_{jt} + Z_{ijt}\Pi^k_t + \varepsilon^k_{ift},$$

where Y^k_{ijt} is the k^{th} quality indicator for patient I discharged from hospital/area j in year t, M^k_{jt} is the raw adjusted measure for indicator k for hospital/area j in year t, Z_{ijt} is a vector of patient covariates for patient I

discharged from hospital/area j in year t, Π^k_t is a vector of parameters in each year t, and ε^k_{ift} is an unexplained residual.